

Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: The Commissioners Date: February 9, 1996

Thru: Chief Clerk's Office

From: Beverly Hartsock, Deputy Director
Office of Policy and Regulatory Development

Subject: **Docket No. 96-0317-RUL.** Consideration of the Mike Kuhlman, Mike Harren and Velda Harren petition for rulemaking to amend 30 TAC Chapters 309, 317 and 335, regarding changes to ground-water provisions for wastewater treatment facilities. Approval of the petition would initiate rulemaking.

BACKGROUND

The agency has received a petition for rulemaking on January 4, 1996 from Mike Harren with duplicate submittals by Mike Kuhlman and Velda Harren (Attachment 1). Under Texas Natural Resource Conservation Commission (TNRCC or commission) rule 30 TAC 275.78, the agency has 60 days (March 4) to consider the petition and either deny the petition in writing, stating the reason for the denial, or initiate rulemaking proceedings.

The agency currently has in place rules which govern municipal and industrial lagoons, under 30 TAC Chapters 309, 317, and 335. It is assumed that the petitioners may wish to modify Chapter 335, Chapter 317, and/or possibly Chapter 309, because the language used in the petition refers to municipal and industrial lagoons that are used to "treat" or hold hazardous waste, human sewage, or brine. They request three changes:

1. Require that on-site monitor wells be installed and ambient ground-water quality be determined before the lagoons are put into operation and that wells be monitored semiannually after lagoons are put into use,
2. No *in-situ* pond or lagoon liners can be used in the construction of facultative ponds or storage lagoons; and
3. Permittee be required to conduct semiannual fluid balances for facultative ponds or storage lagoons.

STAFF FINDINGS

TNRCC rules governing rulemaking are found in 30 TAC §§275.71-275.80. Section 275.78 specifically addresses petitions for the adoption of rules. Petitioners have complied with §275.78 (a)(3)(A). Petitioners have also arguably complied with §275.78(a)(3)(D). However, petitioners have failed to comply with §275.78(a)(3)(C) and §275.78(a)(3)(B). Petitioners have not included any statement of statutory or other authority in their petitions as required by §275.78(a)(3)(C). Although the petitioners

To: The Commissioners
From: Beverly Hartsock

February 9, 1996
Page 2

have included the text of the proposed rule(s), they have not complied with §275.78(a)(3)(B) and indicated if this text is to be added to the text of a current rule, or if this is text for an entirely new rule. While failing to comply with §275.78 does not necessarily mean a petition for rule making will be denied, §275.78(b) states that a petition may be denied for that reason.

Petitioners claim that because of the repeated failure of raw sewage lagoons to contain waste, they are submitting the rule changes to prevent ground-water contamination. The petitioners provide no evidence of "repeated failures" nor identify the degree of failures for ponds which are already lined in accordance with current commission standards. While the petitioners do not offer specific examples, they may be referring to the City of Canyon and the City of Lubbock wastewater permits. In the case of the City of Canyon, the petitioner, and other nearby parties have alleged that the City's facility has caused an adverse impact as measured in wells adjacent to the plant site. An investigation into the City of Canyon facility is currently ongoing. The City of Lubbock has been under an enforcement order for contaminating ground water. The facility has no impoundments of any kind that can be construed as "raw sewage lagoons," only an effluent holding pond that receives treated effluent prior to disposal by irrigation. The ground water problems at this site may well have resulted from inappropriate irrigation practices.

Regarding Change One: The commission has broad standards for the protection of ground water resources. These standards are based on existing authority, including the Texas Water Code, §26.121, which provides for permits that must authorize any discharge to water in the state (including ground water). TNRCC existing standards in 30 TAC §§309.10 - 309.13 and in §317.4 are adequate for the protection of ground water from domestic wastewater, when properly implemented. Regulations in Chapter 335, Subchapter A specify controls for the protection of non-hazardous industrial wastewater. Existing Resource Conservation and Recovery Act requirements adequately protect ground water from hazardous industrial wastewater.

While ground-water monitoring wells are key tools for enforcement or investigation at wastewater facilities, staff generally does not support the blanket requirement for the installation of monitor wells at all facilities with surface impoundments. Applications for facilities with surface impoundments are evaluated on a site-specific basis, and if monitor wells are warranted, they are included in the permit.

Change Two would implement a prescriptive prohibition against the use of *in-situ* liners that may be adequate for protection of ground water. The TNRCC agrees that such liners are not adequate in all circumstances. The petition cites "the repeated failure of *in-situ* liners in the past," but again fails to document instances of such failure.

The existing TNRCC regulations have fairly stringent construction standards for surface impoundments, generally two or three feet of clay material meeting defined Atterberg limits, or clay soils having a permeability of 10^{-7} cm/sec, or a synthetic liner. There is also a provision requiring certification by a Registered Professional Engineer that the pond liners meet the appropriate standards set forth in the rules.

While the permeability of many soils is heterogeneous, in some areas of the state, *in-situ* soils are very homogenous, with a high clay content, and actually exceed the requirements for an emplaced liner. If a facility proposes to use an *in-situ* material for a pond liner that is not up to the standard specified in

To: The Commissioners
From: Beverly Hartsock

February 9, 1996
Page 3

existing rules, the agency will require an emplaced clay liner or a synthetic liner be employed instead of the *in-situ* materials. Blanket prohibition against *in-situ* liners imposes an unnecessary and costly burden on facilities in parts of the state where such liners are more than adequate.

Change Three would constitute an elaborate accounting system based on extensive data gathering for which the accuracy would be difficult to consistently achieve, without great efforts by wastewater operators. At this point, our initial view of the proposal is that it would be difficult to devise, implement, and review. Verification of facility compliance would probably be difficult and the metering system's viability would be highly dependent on consistent operation by staff at wastewater treatment facilities. The relatively small volumes of wastewater that would potentially be discharged to groundwater would be greatly overshadowed by the loss due to evaporation and intended uses, such as irrigation. Staff do not object conceptually to the requirement to construct "fluid balances" for facilities, if the term "fluid balances" means creating an "accounting system" of sorts that would serve to raise a warning flag when "losses" are not explained. However, the technical ability to account for all losses at the level of detail needed to fulfill this requirement would probably be beyond the ability of most wastewater treatment operations.

STAFF RECOMMENDATION

The staff recommends that the commission deny rulemaking as provided by 30 TAC §275.78 based on the petition not meeting the requirements of Texas Government Code, §2001.021 and 30 TAC §275.78, insufficient factual evidence to support the rulemaking, and lack of technical merit in the proposed actions.

CONTACT

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